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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/028,574	12/20/2001	Kenneth Sugrim Singh	US010554	3288

24737 7590 06/12/2007

PHILIPS INTELLECTUAL PROPERTY & STANDARDS
P.O. BOX 3001
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EXAMINER

VAN HANDEL, MICHAEL P

ART UNIT	PAPER NUMBER
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2623

MAIL DATE	DELIVERY MODE
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06/12/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/028,574

Applicant(s)

SINGH, KENNETH SUGRIM

Examiner

Michael Van Handel

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 March 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. This action is responsive to an Amendment filed 3/19/2007. Claims **1-31** are pending. Claims **2-5, 8, 9, 15, 25, and 30** are amended. The examiner hereby withdraws the objection to the specification in view of the applicant's arguments.

Response to Arguments

1. Applicant's arguments regarding claims **2, 4, 5, and 9**, filed 3/19/2007, have been considered, but are moot in view of the new ground(s) of rejection.
2. Applicant's arguments regarding claims **1, 3, 6-8, 11, 13-15, 20-30, and 31**, filed 3/19/2007, have been fully considered, but they are not persuasive.

Regarding claims **1, 8, 15, and 22**, the applicant argues that Harrison does not teach each and every element as set forth in the claims. The examiner respectfully disagrees. The applicant specifically argues that the profile is not an executable script as recited in the subject claims and that it is more analogous to a data structure that stores textual indicia indicative of an action(s) to be taken by the analyzing unit 250/585.

Harrison discloses a multimedia computer comprising a processor 102 for processing data and instructions and a main memory 103 for storing data and instructions for the processor 102 and other devices coupled to the bus 101. A signal processing and selection unit (SPSU) 104 is coupled to bus 101 for monitoring and selecting audio/video signals received by the computer system 100 from a signal broadcast source 110 (col. 3, l. 6-13 & Fig. 1). Harrison also

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discloses an alphanumeric input device 106 for communicating information and command selections to the processor (col. 3, l. 25-27). Fig. 2 of Harrison illustrates an exemplary SPSU 104 comprising a plurality of tuning units 200 for receiving audio and video signals and monitoring the available video signals for subsequent display in a display unit (col. 3, l. 35-37 & Fig. 2). The SPSU 104 includes a profile unit 260 that stores triggers, each of which contains items of interest to the user, and corresponding actions to take once the trigger item is detected (col. 5, l. 11-15). The user programs specific items of interest, such as a list of text of interest, that are monitored by the analyzing unit 250 for each channel. Once the analyzing unit 250 detects the trigger data, the analyzing unit 250 reads the action storage location to determine which action to take (col. 5, l. 15-19). Figs. 3A and 3B indicate that each action associated with a trigger represents a sequence of text instructions to be executed upon detecting the trigger (e.g. Video ON, Audio ON, Maximize, Record, etc.) The examiner notes that the applicant defines a script as text-based sequences of instructions or commands for controlling the operation of a video receiver (p. 8, l. 3-5). Therefore, the examiner interprets the sequence of textual actions to be taken upon the detection of a trigger to be a script.

Further regarding claims **1**, **8**, **15**, and **22**, the applicant argues that Harrison fails to teach or suggest a shell for executing scripts. The examiner respectfully disagrees. As noted in the Office Action mailed 12/18/2006, the applicant defines a shell as an interactive program employed to create and run scripts (p. 8, l. 2-3). As previously pointed out by the applicant, “interactive” is defined by the Merriam-Webster online dictionary as reciprocally active or involving the actions or inputs of a user as with an electronic communication system that involves a user’s responses (<http://www.m-w.com/dictionary/interactive>). Harrison discloses a

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profile unit 260 with user-programmable contents (col. 5, l. 35-40). The profile unit 260 includes a trigger storage location and action storage location, for storing items of interest corresponding to each pre-programmed channel and the particular action to take once the trigger item is detected. The user programs items of interest that are monitored by the analyzing unit 250 for each channel (col. 5, l. 12-16). For example, the user can define a list of text of interest and corresponding actions to be taken (col. 4, l. 43-48 & Figs. 3A, 3B). The profile unit further comprises a priority storage location that stores priority data programmed by the user to prioritize each channel being monitored (col. 4, l. 58-62 & Fig. 3A). The profile unit 260 also allows the user the flexibility to reprogram channel selections in the channel storage location (col. 5, l. 9-11). The interactive program that allows the user to program and reprogram information in the profile is shown in Figures 3A and 3B. A main memory 103 coupled to bus 101 stores data and instructions for a processor 102 and other devices coupled to the bus 101 (col. 3, l. 6-13). Since the processor 102 accepts user commands and forwards them to appropriate components over bus 101 (col. 3, l. 1-33), the examiner interprets the processor and main memory to be of conventional nature, that is, they are the components of a computer system that perform the basic operations of the system, that exchanges data with the system's peripherals, and that manages the system's other components (see <http://www.m-w.com/dictionary/cpu>). The user commands entered in the profile are ultimately communicated to the analyzing units, where the triggering text is searched, and to the arbitrating unit, which resolves display contentions between the analyzing units depending on the profile data. Since the data instructions stored in the main memory 103 and processed by the processor 102 perform the basic operations of the system and exchange data between the system's components, the

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examiner maintains that they comprise an interactive program that creates and runs scripts. Thus, the examiner maintains that Harrison teaches a shell for executing scripts, as claimed.

Regarding claim 3, the applicant argues that Harrison does not teach a shell that is an interactive program employed to create and run the at least one script that selects broadcast programming. The examiner respectfully disagrees for the reasons discussed in the above arguments regarding a shell.

Regarding claim 11, the applicant argues that Harrison does not teach that a script executed by a shell controls operation of the video receiver to cause the selected broadcast programming to be demodulated and transmitted to a recording device. The examiner respectfully disagrees. Harrison discloses user-defined actions in the profile for recording content (Figs. 3A & Figs. 3B). Since the examiner interprets the sequence of text instructions in the action storage of the profile to be a script executed by a shell as noted above, the examiner maintains that Harrison teaches executing a script by a shell to control operation of the video receiver to cause selected broadcast programming to be demodulated and transmitted to a recording device.

Regarding claim 15, the applicant argues that Harrison does not teach a method for extending unattended control capabilities for a video receiver including using an interactive program of the video receiver that creates and executes scripts to execute a script that selects a broadcast program to demodulate, wherein the script is executed by the shell to select broadcast programming for demodulation. The examiner respectfully disagrees for the reasons discussed in the above arguments regarding a shell.

Regarding claim 26, the applicant argues that Harrison does not teach a scripting system that further includes a script manager that schedules a script for execution. The examiner respectfully disagrees. The applicant specifically argues that, as known to one of ordinary skill in the art, scheduling means designating a fixed time at which something is to occur and that, as such, the claim refers to designating a fixed time at which something is to occur. Scheduling generally refers to a plan of procedure for a proposed objective (see <http://dictionary.reference.com/browse/scheduling>). As such, Harrison discloses that a user can reprogram the contents of a profile unit such as changing the priority numbers of the channels being monitored (col. 5, l. 35-40). Even if scheduling were to refer to a given time, the examiner notes that actions would be scheduled for execution from the time they were entered into the user profile. Thus, the examiner maintains that Harrison teaches a script manager that schedules a script for execution, as claimed.

Regarding claim 31, the applicant argues that Harrison does not teach or suggest that the shell enters an idle state when a script end time is reached and remains in the idle state until another script is selected for execution. The examiner respectfully disagrees. Harrison discloses that, upon detecting a trigger item, the analyzing unit 250 reads the action storage location to determine which action to take. This action depends on the priority of the current channel in the display unit and the contents of the action location corresponding to the channel being monitored. For example, with a priority of one, anytime the text "Intel stock" is detected in the video signal, the corresponding channel pre-empts any channel currently being displayed in the display unit. The user can switch to a pre-empted channel after receiving the information in the pre-empting channel (col. 5, l. 11-34). Since the action executed from the instructions in the

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action storage location automatic and predefined, but control is returned to the user after receiving the information in the preempting channel, the examiner maintains that the shell enters an idle state when a script end time is reached and remains in the idle state until another script is selected for execution (i.e. trigger text is found on another channel, which pre-empts a current channel).

Regarding claims 6, 13, and 20, the applicant argues that Zigmond et al. does not teach or suggest that the at least one script is received with a broadcast programming stream. The examiner respectfully disagrees. Zigmond et al. discloses receiving a logical address link either in a broadcast video signal (col. 6, l. 56-61; col. 8, l. 66-67; col. 9, l. 19-32; & col. 10, l. 16-22) or from a different data supplier (col. 9, l. 62-67 & col. 10, l. 1-3, 13-15). As noted by the applicant, if a logical address link is valid, an indication that the logical address link is associated with a currently viewed television program is visually and/or audibly provided to the viewer (col. 9, l. 17-24). If the logical address link is not valid, then no indication is provided to the viewer (col. 9, l. 31-32). The examiner notes that the logical address links are text instructions for execution by a set-top box (col. 6, l. 25-67; col. 7, l. 1-67; & col. 8, l. 1-35). As such, the examiner interprets the logical address links to be scripts. The examiner acknowledges the applicant's argument that the links are not executable scripts that demodulate selected broadcast programming; however, Harrison discloses sequences of text-based instructions for demodulating selected broadcast programming. The examiner relies on Zigmond et al. to teach sending scripts either in broadcast programming or from a different data supplier. As such, the examiner maintains that Zigmond et al. suitable remedies the deficiencies of Harrison.

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Regarding claims **7**, **14**, and **21**, the applicant argues that Zigmond et al. does not teach or suggest that the at least one script is received from an external source separate from a broadcast programming stream. The examiner respectfully disagrees for the reasons stated in the above argument.

Regarding claim **23**, the applicant requests evidence in support of the examiner's asserted motivation "to provide greater user control over a television receiving device" from either a reference or the knowledge generally available to one of ordinary skill in the art. Inaba discloses sending a script to a TV receiving set 11 (col. 3, l. 62-67). A script decoder then displays on the TV screen a symbol mark (e.g. the letter "i") indicating that a supplementary program accompanies the current program. The script decoder starts executing the script to display supplementary data for the program when the viewer keys in a command (col. 4, l. 1-8). Inaba further discloses that the system controller 133 is provided with an automatic display select switch 133, which is a switch for permitting an automatic shift into a supplementary program display mode for a teletext program and the data that are being currently received. When the system controller recognizes that the TV signal currently being received contains a signal for supplementary program, it determines whether the automatic display switch 133 is on or off. If it is off, then a supplementary program mark (e.g., "i" mark) is displayed. The on/off operation of the automatic display select switch 133 is controlled by way of a remote control (col. 8, l. 7-34). Thus, Inaba is representative of the fact that one of ordinary skill in the art would be motivated to provide a user with the option of manually executing a script instead of automatically executing the script.

Further regarding claim **23**, the applicant there is not suggestion or motivation to modify Harrison as purported by the examiner, because Harrison states that what is needed is a system that automatically selects and displays programming based on programming content. The examiner respectfully disagrees. As discussed in the above argument, Inaba is not in contrast to Harrison, but provides a user with the option of automatically displaying supplemental content or manually displaying the content.

Still further regarding claim **23**, the applicant argues that the pre-selected supplemental data does not select a television program from a plurality of airing television programs to display. The applicant specifically argues that if Harrison were modified with this teaching of Inaba, the result would not teach or suggest user manual initiation of a script that selects a program from a plurality of programs to demodulate for display. The applicant argues that it would instead allow a user to manually decide whether to display pre-selected supplemental data for a television program while watching the television program. The examiner respectfully disagrees. As noted in the Office Action below, Harrison discloses a series of text instructions that cause an action to be performed in response to detection of trigger data. Harrison further discloses that, in a situation where the action to be performed is to pre-empt the currently viewed channel, the action taken is automatic (col. 5, l. 31-34). The examiner relies on Inaba to teach providing a user with the option of manual execution of an action. Thus, the examiner maintains that Inaba suitably remedies the deficiencies of Harrison.

Regarding claim **24**, the applicant requests evidence in support of the examiner's asserted motivation "to prevent a user from missing programming matching their interests" from either a reference or the knowledge generally available to one of ordinary skill in the art. Williams et al.

discloses an entertainment system 100 that stores user profile information for each of the users of system 100 (col. 2, l. 65-67 & col. 3, l. 1-2). The user profile also includes storage for user-defined requests for specific titles of shows/movies or keywords. Given a particular search request, the system controller 104 searches future programming information each time it receives updated programming information and prompts the user with the found program information (col. 11, l. 31-44 & col. 12, l. 6-10). Williams et al. states a need for a method and apparatus for determining and updating user preferences in an entertainment system in order to configure the entertainment system for the user (col. 1, l. 60-67). Thus, Williams et al. is representative of the fact that one of ordinary skill in the art would be motivated to present a user with suggested programming based on user preferences.

Further regarding claim **24**, the applicant argues that modifying Harrison with the user provided search requests of Williams et al. would not provide for periodic execution of a script to check future programming, since Harrison analyzes television programming as the television programs are received and decoded and not future broadcast programming. The examiner respectfully disagrees. Harrison discloses a system for analyzing different types of data including text, numbers, graphics, and Internet URL's (col. 3, l. 56-60 & col. 5, l. 43-46). The system can analyze data within the vertical blank interval (VBI) of a transmitted television signal (col. 4, l. 35-39). When an analyzing unit detects a user-provided search trigger, a corresponding action is performed. In the case of Internet URL's, when an Internet URL is received, the web page to which the received Internet URL points is retrieved. The web page retrieved is searched for data, which matches the criterion specified by the corresponding triggering portion of the profile unit data (col. 6, l. 23-28). Williams et al. discloses a system that scans programming

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information found in a program database periodically to identify programs, which may be of particular interest to the user, based on a user profile. The program database can be updated by accessing a remote server via telephone/network communications, a vertical blanking interval (VBI), etc. (col. 8, l. 12-24). A user profile database includes storage for user-defined requests. The requests can be for specific titles of shows/movies or keywords. Given a particular search request, system controller 104 searches the programming information each time it receives updated programming information (via an on-line service, etc.) and prompts the user with the found program information (col. 11, l. 31-44). Harrison states a desirability to have a method and apparatus for monitoring for different types of information (col. 2, l. 4-5). Williams et al. states a need for determining and updating user preferences in order to configure an entertainment system in accordance with a user profile corresponding to the user (col. 1, l. 60-67). In light of the above, the examiner maintains that it would be obvious to one of ordinary skill in the art to modify Harrison to include periodically searching future programming information, such as that taught by Williams et al. in order to prevent a user from missing programming that matches their interests.

Regarding claim 25, the applicant argues that Williams et al. does not teach or suggest automatic selection of appropriate content for a viewer based on the user identity. The examiner respectfully disagrees. The applicant specifically argues that Williams et al. teaches simply using the user preferences for the identified user and does not take into account whether such preferences result in the automatic selection of inappropriate content for the viewer. Williams et al. discloses determining which of a plurality of users is currently using an entertainment system. After determining which user is using the system, the system controller dynamically configures

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system configuration settings of the system in accordance with user preference information found in the user profile corresponding to the identified user (col. 5, l. 8-35). Williams et al. discloses that the user profile includes user preference information, such as user preferred channels, genre information, whether to block content information, favorite shows, most frequently watched channels, keywords to search, etc. (col. 5, l. 30-55; col. 6, l. 46-60; & col. 11, l. 31-42). The system determines which content is most appropriate for the user, given the user's profile, and suggests or restricts content for the user (col. 6, l. 23-32). The examiner interprets this functionality as representing the automatic selection of appropriate content for a viewer based on the user identity, as currently claimed.

Regarding claim **28**, the applicant requests evidence in support of the examiner's asserted motivation "to better personalize a television viewing experience" from either a reference or the knowledge generally available to one of ordinary skill in the art. Williams et al. discloses an entertainment system 100 that stores user profile information for each of the users of system 100 (col. 2, l. 65-67 & col. 3, l. 1-2). Williams et al. further discloses monitoring a user and configuring a user's profile based on the user's viewing history (col. 6, l. 3-56 & col. 7, l. 52-67). Williams et al. still further discloses presenting the user with programming suggestions based on the user profile (col. 8, l. 12-19 & col. 11, l. 1-23). Williams et al. states a need for a method and apparatus for determining and updating user preferences in an entertainment system in order to configure the entertainment system for the user (col. 1, l. 60-67). Thus, Williams et al. is representative of the fact that one of ordinary skill in the art would be motivated to present a user with programming suggestions based on a user's viewing history in order to better personalize a television viewing experience.

Further regarding claim **28**, the applicant argues that Williams et al. is silent regarding an executing script that extrapolates from a viewing history to rank programs for display or recording. The examiner respectfully disagrees for the reasons stated in the above arguments.

Regarding claim **30**, the applicant argues that Williams et al. is silent regarding an executing script that automatically records a program designated to be displayed instead of displaying the program when the user is concurrently viewing a different program. The examiner respectfully disagrees. Williams et al. discloses presenting a user with programming suggestions based on a user profile (col. 8, l. 12-19 & col. 11, l. 1-23). Williams et al. further discloses that if the user elects to forego the suggested programming, system controller may then prompt the user with the option of recording one of the suggested programs. If the user elects to record one of the program suggestions, system controller configures system 100 to record the program selection to any one of the available recording media (col. 11, l. 45-51). That is, it is the system controller that performs the actual function of configuring the system for recording. As such, the examiner interprets the system controller as automatically recording the program.

Regarding claim **27**, the applicant argues that Holtz et al. does not teach or suggest that the executable script includes instructions for selectively skipping commercials while recording the selected broadcast programming. The applicant specifically argues that Holtz et al. teaches that a user may elect to have advertisements displayed as electronic banners rather than as audio or video commercials or skipped altogether for commercial-free program viewing, which is in contrast to the subject claim. The examiner respectfully disagrees. Holtz et al. discloses broadcasting live television programming to a record device (p. 10, paragraph 126 & p. 14, paragraph 164). The broadcaster links video commercials to specific shows (p. 19, paragraphs

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224, 225). Users who are not interested in viewing the video commercial can exercise the option of skipping the commercial feed through a profile (p. 25, paragraph 307). In one embodiment, Holtz et al. discloses that in skipping video advertisements, the sponsor would advertise the product in an electronic banner in order to ensure advertisement revenue (p. 25, paragraph 308); however, the examiner is not relying on this embodiment to remedy the deficiencies of Harrison. The examiner relies on the teaching of delaying or skipping commercials when recording content. The examiner notes; however, that even in this embodiment the commercial is skipped. The fact that an electronic banner is displayed in its place does not mean that the commercial has not been skipped. Thus, the examiner maintains that Holtz et al. suitably remedies the deficiencies of Harrison.

Regarding claim 29, the applicant requests evidence in support of the examiner's asserted motivation "to provide greater user control over a television recording device" from either a reference or the knowledge generally available to one of ordinary skill in the art. Lewis discloses providing users with the options for digital compression and encoding based on desired picture/sound quality versus storage capacity (the examiner notes that available recording time is directly related to picture/sound quality and storage capacity)(p. 15, paragraph 156). Lewis further discloses a need an integrated information management and processing system that provides for the handling, sorting, and storage of large amounts of data that is a user-defined and user resident environment (p. 2, paragraph 11). Thus, Lewis is representative of the fact that one of ordinary skill in the art would be motivated to present a user greater control over a television recording device in order to handle, sort, and store large amounts of data.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 3, 8-11, 15-18, 22, 23, 26, 31 are rejected under 35 U.S.C. 102(b) as being anticipated by Harrison.

Referring to claim 1, Harrison discloses a system extending unattended control capabilities for a video receiver, comprising:

- a shell for executing scripts controlling demodulation of broadcast programming (the examiner notes that a processor processes data and instructions stored in a main memory. These data and instructions provide communication between a user and an operating system, thus performing the operation of a shell)(col. 3, l. 6-13, 21-31 & Fig. 1); and
- a memory containing at least one script including a sequence of commands for demodulating selected broadcast programming (the examiner notes that the personal profile stores trigger data and an action to be performed in response to a recognized trigger. Since a set of actions are performed in recognition of a trigger, the profile actions perform the operation of scripts), wherein the at least one script is executable by the shell to select broadcast programming for demodulation and display or recording from among one or more concurrently airing programs each matching at least one of a plurality of user-specified descriptive criteria, wherein said at least one

script employs associated previously-defined user priorities or conditions to select between conflicting matches or routing options (col. 3, l. 53-67; col. 4, l. 1-11, 43-67; col. 5, l. 11-40; & Figs. 3A-3B).

Referring to claim 3, Harrison discloses the system as set forth in claim 1, wherein the shell is an interactive program employed to create and run the at least one script (the examiner notes that the main memory 103 stores data and instructions for the processor 102 and other devices coupled to the bus 101)(col. 3, l. 6-13, 21-31, 53-67; col. 4, l. 1-11, 43-57; col. 5, l. 11-40; & Fig. 1).

Referring to claims 11 and 18, Harrison discloses the system/method as set forth in claims 8 and 15, respectively, wherein the at least one script, when executed by the shell, controls operation of the video receiver to cause the selected broadcast programming to be demodulated and transmitted to a recording device (col. 4, l. 54-56 & Fig. 3A).

Referring to claim 8, Harrison discloses a video receiver comprising:

- an input 200 that receives broadcast programming (Fig. 2); and
- a scripting system that extends unattended control capabilities for the video receiver (Fig. 3A), the scripting system comprising:

- o a shell (the examiner notes that a processor processes data and instructions stored in a main memory. These data and instructions provide communication between a user and an operating system, thus performing the operation of a shell)(col. 3, l. 6-13, 21-31 & Fig. 1), including,
 - a script manager that creates executable scripts that control demodulation of broadcast programming and a script executor that

executes the created executable scripts (col. 4, l. 43-50 & col. 5, l. 8-40); and

- o a memory that stores scripts created by the shell wherein the shell executes at least one stored script (the examiner notes that the personal profile stores trigger data and an action to be performed in response to a recognized trigger. Since a set of actions are performed in recognition of a trigger, the profile actions perform the operation of scripts) and wherein the executing script selects broadcast programming for demodulation from among one or more concurrently airing programs each matching at least one of a plurality of user-specified descriptive criteria, wherein said at least one script employs associated previously-defined user priorities or conditions to select between conflicting matches or routing options (col. 3, l. 53-67; col. 4, l. 1-11, 43-67; col. 5, l. 11-40; & Figs. 3A-3B).

Referring to claims **10** and **17**, Harrison discloses the system/method as set forth in claims **8** and **15**, respectively, wherein the at least one script, when executed by the shell, controls operation of the video receiver to cause a sequence of programs broadcast during separate contiguous time periods on different channels to be demodulated and displayed by the video receiver (the examiner notes that in time, different programs on different channels will be displayed in accordance with the triggering and priority data stored in the profile)(col. 3, l. 65-67; col. 4, l. 54-56; col. 5, l. 31-34; & col. 6, l. 6-15).

Referring to claim **15**, Harrison discloses a method for extending unattended control capabilities for a video receiver comprising using an interactive program of the video receiver

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that creates and executes scripts to execute a script that selects a broadcast program to demodulate (the examiner notes that a processor processes data and instructions stored in a main memory. These data and instructions provide communication between a user and an operating system to create and modify executable actions in the profile unit 260)(col. 3, l. 6-13, 21-31; col. 4, l. 47-54; col. 5, l. 8-40; & Fig. 1), wherein the script is executed by the shell to select broadcast programming for demodulation from among one or more concurrently airing programs each matching at least one of a plurality of user-specified descriptive criteria, wherein said at least one script employs associated previously-defined user priorities or conditions to select between conflicting matches or routing options (col. 3, l. 53-67; col. 4, l. 1-11, 43-67; col. 5, l. 11-40; & Figs. 3A-3B).

Referring to claim 16, Harrison discloses the method as set forth in claim 15, further comprising identifying the selected broadcast programming within the at least one script by one of:

- one or more channels on which the selected broadcast programming is to be broadcast and one or more time periods during which the selected broadcast programming is to be broadcast;
- a title of the selected broadcast programming; and
- keywords describing the selected broadcast programming (col. 4, l. 47-50).

The USPTO considers the applicant's "one of" language to be anticipated by any reference containing any of the subsequent corresponding elements.

Referring to claim 22, Harrison discloses a datastream stored on computer readable medium for use with a video receiver (Fig. 3A), wherein the datastream includes one or more

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computer readable fields for a broadcast programming stream including selected broadcast programming (channel and trigger fields) and at least one script including a sequence of commands for causing the video receiver to demodulate the selected broadcast programming for display or recording (action field), wherein the at least one script is executable by a shell running within the video receiver (see citations and examiner's notes with respect to claim 1 above)(col. 4, l. 54-57 & Fig. 4a).

Referring to claim 26, Harrison discloses the video receiver as set forth in claim 8, wherein the scripting system further includes a script manager that schedules the script for execution (the examiner notes that the script of Harrison executes when the triggering text is found in a monitored channel. Therefore, the examiner interprets the triggering text to be a script manager that schedules the script for execution, as claimed)(col. 5, l. 35-40 & Fig. 3A).

Referring to claim 31, Harrison discloses the datastream as set forth in claim 22, wherein the shell enters an idle state when a script end time is reached and remains in the idle state until another script is selected for execution (the examiner notes that when trigger text is detected, the current channel is automatically pre-empted if the priority of the new trigger is greater. After the pre-empting has completed and the user has received the information on the preempting channel, the user can switch back to the pre-empted channel or choose to continue to display the preempting channel. The examiner interprets this as the script having completed, since the user now has control again. If a trigger with a greater priority is encountered again, the channel will again be pre-empted)(col. 5, l. 12-34 & Fig. 4A).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2, 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Harrison in view of Goldschmidt Iki et al.

Referring to claims 2 and 9, Harrison discloses the system as set forth in claims 1 and 8, respectively. Harrison further discloses that the analyzing units 250 can analyze closed-captioning data or URL web page data for predefined items of interest to a user in order to select a program for demodulation from among one or more concurrently airing programs (col. 3, l. 53-60; col. 4, l. 23-39; & col. 6, l. 23-31). Harrison does not disclose that the one or more concurrently airing programs are identified by searching a program guide received with broadcast programs from an external source, wherein the program guide describes program content of the broadcast programs and is periodically updated via a subsequent reception of broadcast programs. Goldschmidt Iki et al. discloses using predetermined content criteria stored in a user profile in a set-top box, such as keywords, to search programming content, such as closed caption information or an electronic program guide (EPG), for content that corresponds with an individual user's preferences or personality (col. 3, l. 18-38, 52-56; col. 4, l. 1-26, 51-60; col. 5, l. 33-36; & Figs. 2-6). A user-defined response is executed when predetermined content criteria is found (col. 3, l. 35-38; col. 5, l. 33-36, 57-53). It would have been obvious to one of ordinary skill in the art at the time that the invention was made to modify an analyzing unit 250

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of Harrison to include searching for keywords in an EPG, such as that taught by Goldschmidt Iki et al. in order to provide greater flexibility in searching.

5. Claims 4, 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Harrison in view of Kitsukawa et al.

Referring to claims 4 and 5, Harrison discloses the system as set forth in claim 1. Harrison does not disclose that the at least one script, when executed by the shell, controls operation of the video receiver to cause broadcast of commercials for a particular product to be demodulated and transmitted to a recording device and to cause broadcast of only commercials that provide sales information as private data along with broadcast program content. Kitsukawa et al. discloses an integrated receiver/decoder (IRD) with a stored coupon mode that stores coupons for particular products advertised in broadcast programs or commercials (col. 10, l. 37-67; col. 11, l. 1, 35-38; & Fig. 8-10). It would have been obvious to one of ordinary skill in the art at the time that the invention was made to modify the triggered actions of Harrison to include storing coupons, such as that taught by Kitsukawa et al. in order to provide potential customers with product information and incentive to purchase (Kitsukawa et al. col. 1, l. 52-55).

6. Claims 6, 7, 13, 14, 20, 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Harrison in view of Zigmond et al.

Referring to claims 6, 7, 13, 14, 20, and 21, Harrison discloses the system as set forth in claims 1, 8 and 15. Harrison does not disclose receiving a script together with a broadcast programming stream including selected broadcast programming or receiving a script from an

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external source separate from a broadcast programming stream including selected broadcast programming. Zigmond et al. discloses receiving a logical address link either in a broadcast video signal (col. 6, l. 56-61; col. 8, l. 66-67; col. 9, l. 19-32; & col. 10, l. 16-22) or from a different data supplier (col. 9, l. 62-67 & col. 10, l. 1-3, 13-15). It would have been obvious to one of ordinary skill in the art at the time that the invention was made to modify Harrison to receive instruction data either in broadcast programming or from a different data supplier, such as that taught by Zigmond et al. in order to provide an intelligent mechanism for communicating instruction data (col. 2, l. 28-29).

7. Claims **12, 19** are rejected under 35 U.S.C. 103(a) as being unpatentable over Harrison in view of Liebenow.

Referring to claims **12** and **19**, Harrison discloses the system/method as set forth in claims **11** and **18**, respectively. Harrison does not disclose a method of, prior to causing the selected broadcast programming to be demodulated and transmitted to a recording device, checking for previous demodulation and transmission of the selected broadcast programming to the recording device, wherein execution of the at least one script is terminated if the selected broadcast programming was previously demodulated and transmitted to the recording device. Liebenow discloses a method of determining whether or not a program has been previously recorded, and if it has, inhibiting the recording of the program (col. 5, l. 1-4, 25-38, 58-67 & col. 6, l. 1-3). It would have been obvious to one of ordinary skill in the art at the time that the invention was made to modify Harrison to determine whether or not a program has been previously recorded, and inhibit the recording of a program if it has, such as that taught by Liebenow in order to allow

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a user to employ a record function without having to worry about inadvertently recording duplicate programs (col. 1, l. 29-31).

8. Claim **23** is rejected under 35 U.S.C. 103(a) as being unpatentable over Harrison in view of Inaba.

Referring to claim **23**, Harrison discloses the system as set forth in claim 1. Harrison further discloses a sequence of text-based instructions (script) that are executed (by a shell) in response to a trigger (Fig. 3A). Harrison does not disclose that the shell executes the script that is stored in the memory when a user manually initiates execution of the script by selecting a script execute option. Inaba discloses storing a script in the memory of a TV receiving set. A script decoder displays on the TV screen a symbol mark (e.g., the letter "i") in order to notify the viewer about a supplementary program. The script decoder starts executing the script to display supplementary data for the program when the viewer keys in a command (col. 3, l. 66-67 & col. 4, l. 1-8). It would have been obvious to one of ordinary skill in the art at the time that the invention was made to modify the automatic script execution of Harrison to include executing the script upon user command, such as that taught by Inaba in order to provide greater user control over a television receiving device.

9. Claims **24, 25, 28, 30** are rejected under 35 U.S.C. 103(a) as being unpatentable over Harrison in view of Williams et al.

Referring to claim **24**, Harrison discloses the system as set forth in claim 1. Harrison does not disclose that the shell automatically periodically executes the script to check future

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programming. Williams et al. discloses an entertainment system 100 that stores user profile information for each of the users of system 100 (col. 2, l. 65-67 & col. 3, l. 1-2). The user profile also includes storage for user-defined requests for specific titles of shows/movies or keywords. Given a particular search request, the system controller 104 searches future programming information each time it receives updated programming information and prompts the user with the found program information (col. 11, l. 31-44 & col. 12, l. 6-10). It would have been obvious to one of ordinary skill in the art at the time that the invention was made to modify the scripts in the user profile of Harrison to include periodically searching future programming information for user-defined keywords, such as that taught by Williams et al. in order to prevent a user from missing programming that matches their interests.

Referring to claim **25**, Harrison discloses the system as set forth in claim 1. Harrison does not disclose that the executing script selects broadcast programming based on an identity of a viewer, wherein the identity of the viewer is a condition to automatically choose content appropriate for the viewer. Williams et al. discloses determining which of a plurality of users is currently using an entertainment system. After determining which user is using the system, the system controller dynamically configures system configuration settings of the system in accordance with user preference information found in the user profile corresponding to the identified user, and offers programming/entertainment suggestions to enhance the user's enjoyment of the system (col. 3, l. 4-16 & col. 5, l. 8-35). It would have been obvious to one of ordinary skill in the art at the time that the invention was made to modify the system of Harrison to include determining which user is using the system prior to accessing the data in the user

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profile, such as that taught by Williams et al. in order to better personalize a television viewing experience.

Referring to claim **28**, Harrison discloses the video receiver as set forth in claim 1. Harrison does not disclose that the script ranks alternative programs for display or recording by automatically extrapolating from a viewing history of the subscriber's recently viewed programs. Williams et al. discloses monitoring a user and configuring a user's profile based on the user's viewing history (col. 6, l. 33-56 & col. 7, l. 52-67). Williams et al. further discloses presenting the user with programming suggestions based on the user profile (col. 8, l. 12-19 & col. 11, l. 1-23). It would have been obvious to one of ordinary skill in the art at the time that the invention was made to modify the profile of Harrison to include presenting a user with programming suggestions based on a user's viewing history, such as that taught by Williams et al. in order to better personalize a television viewing experience.

Referring to claim **30**, Harrison discloses the method as set forth in claim 15. Harrison does not disclose that the executing script automatically records a program designated to be displayed instead of displaying the program when the user is concurrently viewing a different program. Williams et al. discloses presenting a user with programming suggestions based on the user profile (col. 8, l. 12-19 & Col. 11, l. 1-23). Williams et al. further discloses that if the user elects to forego the suggested programming, system controller may then prompt the user with the option of recording one of the suggested programs. If the user elects to record one of the program suggestions, system controller configures system 100 to record the program selection to any one of the available recording media (col. 11, l. 45-51). It would have been obvious to one of ordinary skill in the art at the time that the invention was made to modify Harrison to include

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prompting the user with the option of recording suggesting programs, such as that taught by Williams et al. in order to prevent a viewer from missing a program they're interested in.

10. Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Harrison in view of Holtz et al.

Referring to claim 27, Harrison discloses the video receiver as set forth in claim 11, wherein the at least one script, when executed by the shell, controls operation of the video receiver to cause the selected broadcast programming to be demodulated and transmitted to a recording device (col. 4, l. 54-56 & Fig. 3A). Harrison does not disclose that the script includes instructions for selectively skipping commercials while recording the selected broadcast programming. Holtz et al. discloses broadcasting live television programming to a record device (p. 10, paragraph 126 & p. 14, paragraph 164). The broadcaster links video commercials to specific shows (p. 19, paragraphs 224, 225). Users who are not interested in viewing the video commercial can exercise the option of skipping the commercial feed through a profile (p. 25, paragraph 307). It would have been obvious to one of ordinary skill in the art at the time that the invention was made to modify the profile of Harrison to include an option for skipping commercial feeds, such as that taught by Holtz et al. in order to better accommodate users not interested in viewing commercials (p. 25, paragraph 307).

11. Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Harrison in view of Lewis.

Referring to claim 29, Harrison discloses the method as set forth in claim 15. Harrison does not disclose using the executing script for controlling tradeoffs between recording time, picture quality, and available storage space. Lewis discloses providing users the options for digital compression and encoding based on desired picture/sound quality versus storage capacity (the examiner notes that available recording time is directly related to picture/sound quality and storage capacity)(p. 15, paragraph 156). It would have been obvious to one of ordinary skill in the art at the time that the invention was made to modify the profile of Harrison to include user options for digital compression and encoding based on desired picture/sound quality versus storage capacity, such as that taught by Lewis in order to provide greater user control over a television recording device.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Van Handel whose telephone number is 571-272-5968.

The examiner can normally be reached on 8:00am-5:30pm Mon.-Fri..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Kelley can be reached on 571-272-7331. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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